DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, claims 1-16 in the reply filed on 10/27/2011 is acknowledged.

Claims 19, 21, 22 and 24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/27/2011. However, Applicant failed to present any arguments accompanying the traversal. The restriction requirement is made final.

Claim Objections

Claim 13 is objected to because of the following informalities: the term "and" should be inserted after the terms, "the image-receptive material," in line 4 of the instant claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kojima et al. (US 5,380,612).

Claims 15 and 16 are product-by-process claims. Applicant is reminded of MPEP2113: "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 15 and 16, Kojima et al. disclose an imaging material (negative-working planographic printing plate; see col. 1, lines 6-18).

Claim 15 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kalle (CA 936035 A1).

Claim 15 is a product-by-process claim. Applicant is reminded of MPEP2113: "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 15, Kalle discloses an imaging material (sensitized printing plate; see page 1, lines 9-11).

Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Weed et al. (US 2002/0064728 A1).

Claims 15 and 16 are product-by-process claims. Applicant is reminded of MPEP2113: "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 15 and 16, Weed et al. disclose an imaging material (negative-working planographic printing plate; see paragraphs [0007 and 0018]).

Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Verschueren et al. (EP 1506854 A1).

Claims 15 and 16 are product-by-process claims. Applicant is reminded of MPEP2113: "[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 15 and 16, Verschueren et al. disclose an imaging material (negative-working lithographic printing plate; see paragraphs [0004 and 0013]).

Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Verschueren et al. (EP 1506854 A1).

Regarding claims 1-13, Verschueren et al. disclose a method for an imaging material (a thermally imageable, negative-working lithographic printing plate; claims, examples and abstract), comprising a step of directing (baking) infrared radiation source upon exposed areas of a processed imaging material ([0003]). The baking step is carried out by exposing the printing plate to an

infrared radiation source that emits infrared radiation between 770 nm to 5 μm (770 nm to 5000 nm; [0004]). The method further comprises a step of imagewise exposed the printing plate to form an exposed printing plate ([0010-0011]) and a step of developing the exposed printing plate off-press or on-press to provide the developed printing plate ([0012]). The step of directing comprises at least one of flooding (overall baking) the developed printing plate with infrared radiation and raster scanning infrared radiation onto the developed printing plate ([0007]). The directing step heats the developed printing plate to a temperature in the range from about 140℃ to about 160℃ (heating above 150℃; [0007]) and the directing step comprises directing the infrared radiation incident upon the developed printing plate for about 15 seconds to about 25 seconds; dwell time lower than 1 minute ;0007). The method further comprises controlling heating of the developed printing plate by controlling at least one dwell time of the exposed material when adjacent the infrared radiation source, distance of the infrared source form the image-receptive material , and output of the infrared radiation ([0005-0007]).

Verschueren et al. do not explicitly disclose a method for improving the durability of an image on an imaging material as instantly recited. However, Verschueren et al. teach that the method improves the printing run length (press run) of the lithographic printing plate and increases the chemical resistance of the photosensitive coating [0004]. It is the position of the examiner that the characteristics of improving the durability of an image are inherent, given that the method by Verschueren et al. and the instant method are the same processes.

Therefore, the method of Verschueren et al. improves the durability of the imageable element (lithographic printing plate).

Claims 1-4, 6, 9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (US 5,380,612).

Regarding claims 1-4, 6, 9, 12 and 13, Kojima et al. disclose a method (process; abstract and claims) for an imaging material (a thermally imageable, negative-working planographic (lithographic) printing plate; col. 11, lines 1-7 and 32-39), comprising a step of directing (post-exposure) infrared radiation (infrared heater) upon exposed areas of a processed imaging material (col. 10, lines 34-58). The method further comprises a step of imagewise exposed the printing plate to form an exposed printing plate (col. 10, lines 3-15) and a step of developing the exposed printing plate off-press to provide the developed printing plate (col. 10, lines 16-33). The step of directing comprises at least one of flooding (overall exposing) the developed printing plate with infrared radiation (infrared heaters) and raster scanning infrared radiation (heater) onto the developed printing plate (col. 10, lines 34-41 and lines 55-68). The directing step heats the developed printing plate to a temperature in the range from about 140℃ to about 160℃ (heating between 50℃ to 160℃; col. 10, lines 41-43). The method further comprises controlling heating of the developed printing plate by controlling at least one dwell time of the exposed material when adjacent the infrared radiation source, distance of the infrared source form the image-receptive material , and output of the infrared radiation (col. 11, lines 1-16).

Kojima et al. do not explicitly disclose a method for improving the durability of an image as recited in the instant claims. However, Kojima et al. disclose that the invention is to provide a photochemical process (method) for the preparation of printing plates having improved dissolution latitude, and improved reproducibility of small dots and fine lines in the imaged areas col. 1, lines 20-34 and col. 2, lines 25-35). Improved reproducibility results in a more durable image. Also, it is well-known in the art that if the durability of an image is improved, then the press run length (printing run length) will also be improved. Therefore, it would have been obvious to include that the method of Kojima et al. is used for improving the durability of an image on an imaging material in view of improved image reproducibility.

Claims 1-4, 6-8, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalle (CA 936035 A1) as evidenced by Cessac (US 2003/0082493 A1).

Regarding claims 1-4, 6-8, 11 and 13, Kalle discloses a method (process; abstract and claims) for an imaging material (an exposed and developed sensitized printing plate; page 1, lines 9-11), comprising a step of directing electro-magnetic radiation upon exposed areas of a processed imaging material (page 2, lines 1-2 and abstract). The electro-magnetic radiation is from a quartz-halogen lamp (page 5, lines 13-17). It is well-known in the art that a quartz-halogen lamp is an infrared lamp that emits radiation between 700 nm to 1400 nm as evidenced by Cessac in paragraph [0008]. The method further comprises a step of imagewise exposed the printing plate to form an exposed printing plate

and a step of developing the exposed printing plate off-press to provide the developed printing plate (abstract and page 1, lines 9-20 and claims). The step of directive the plate comprises flooding (overall exposing the entire width) the developed plate with the source of radiation (infrared lamp; page 4, lines 3-20). The method further comprises controlling heating of the developed printing plate by controlling at least one dwell time of the exposed material when adjacent the infrared radiation source, distance of the infrared source form the image-receptive material , and output of the infrared radiation (page 3, line 27- page 4, line 8).

Kalle does not explicitly disclose a method for improving the durability of an image as recited in the instant claims. However, Kalle recognizes that it is well-known in the art to provide an imaging material (printing plate) that yield considerably longer runs (printing run or press run; page 1, lines 12-21). Kalle teaches the same process as applicant so it would be expected that the durability of the image would be improved, absent any evidence to the contrary. Therefore, it would have been obvious to one of ordinary skill in the art to include that the method of Kalle for improving the durability of an image on an imaging material in view of yielding a considerably longer printing runs.

Claims 1-4, 7-8, 10-11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weed et al. (US 2002/0064728 A1).

Regarding claims 1-4, 7-8, 10-11, 13 and 14, Weed et al. disclose a method (process; abstract and [0097-0099]) for an imaging material (a photoresist or a flexographic printing plate), comprising a step of directing (post-

exposure) infrared radiation [0002] upon exposed areas of a processed imaging material [0182]. The method further comprises a step of imagewise exposing the printing plate to form an exposed printing plate and a step of developing the exposed printing plate off-press to provide the developed printing plate [0099-0100 and 0182]. The directing step comprises directing the infrared radiation incident upon the developed printing plate for about 15 seconds to about 25 seconds [0099]. The method further comprises controlling heating of the developed printing plate by controlling at least one dwell time of the exposed material when adjacent the infrared radiation source, distance of the infrared source form the image-receptive material and output of the infrared radiation ([0099]). Also, Weed et al. disclose the processed imaging material comprises a processed resist (examples and [0099] and wherein the method further comprises imagewise exposing the resist to from an exposed resist and etching the exposed resist to form a processed resist [0100].

Weed et al. do not explicitly disclose a method for improving the durability of an image as recited in the instant claims. However, Weed et al. disclose a method comprising a photoimaging (imaging) material that absorbs strongly in the near IR region of the electromagnetic spectrum [0007] and when the photoimaging material is developed an effective resist image can be used to produce a flexographic printing plate for printing [0182]. Weed et al. recognize in the comparative examples that the photoimaging material that does not absorb strongly in the near IR region of the electromagnetic spectrum is less efficient in printing and image capabilities [01823]. Also, it is well-known in the art that if the

durability of an image is improved, then the press run length (printing run length) will also be improved. Weed et al. teach the same process as applicant so it would be expected that the durability of the image would be improved, absent any evidence to the contrary. Therefore, it would have been obvious to one of ordinary skill in the art to include the method of Weed et al. for improving the durability of an image.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Simpson et al. (US 2009/0202948 A1) and Miller et al. (US 3,987,728).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANCEITY ROBINSON whose telephone number is (571)270-3786. The examiner can normally be reached on Monday to Friday (with every other Friday off): 9:00 -6:00 pm eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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